

XII.—*An Anglo-Saxon Cemetery in Ipswich.* By NINA FRANCES LAYARD, F.L.S.

Read 29th November, 1906.

ON January 4th of this year (1906) when visiting some works that had been started for the relief of the unemployed at Hadleigh Road, Ipswich, I was fortunate enough to discover that the high land which was being levelled was the site of an Anglo-Saxon cemetery. The slope overlooks the river Gipping, and is on the west side of the town, near the railway. (See plan, Fig. 1.) Already over 150 men had been at work for two months, little dreaming that treasures of antiquity were being thrown away at nearly every stroke of the pick. Five skeletons had been found, but these had been pronounced quite recent, and were re-interred without further notice being taken of them.

An examination of the ground from which the skeletons had been removed convinced me that the interments were of great age, for the Crag was in a very clean condition, almost entirely free from any signs of organic decay.

A week after my first visit to the field, while searching round the walls of the cutting, I noticed human bones protruding. A skeleton was disinterred, but nothing was found with it. It lay facing north-east. On January 19th another grave was found, and this gave the clue to the real nature of the burials. The skull of this skeleton was of extraordinary shape, the forehead being more receding than that of the Neanderthal skull, and I at first hoped I had come upon a calvaria that would eclipse that of *Pithecanthropus* itself. As strict accuracy is important as regards such discoveries, a photographer was sent for, and a picture taken as the skull was removed from its place. Further investigation,

however, revealed the boss of an Anglo-Saxon shield. I at once communicated the find to Sir John Evans, who explained the true nature of the discovery.

The skull was sent to Professor Macalister of Cambridge, who pronounced its peculiar formation to be due to damp and the weight of the earth on the unprotected skeleton. Pressure from above had flattened out the forehead. That

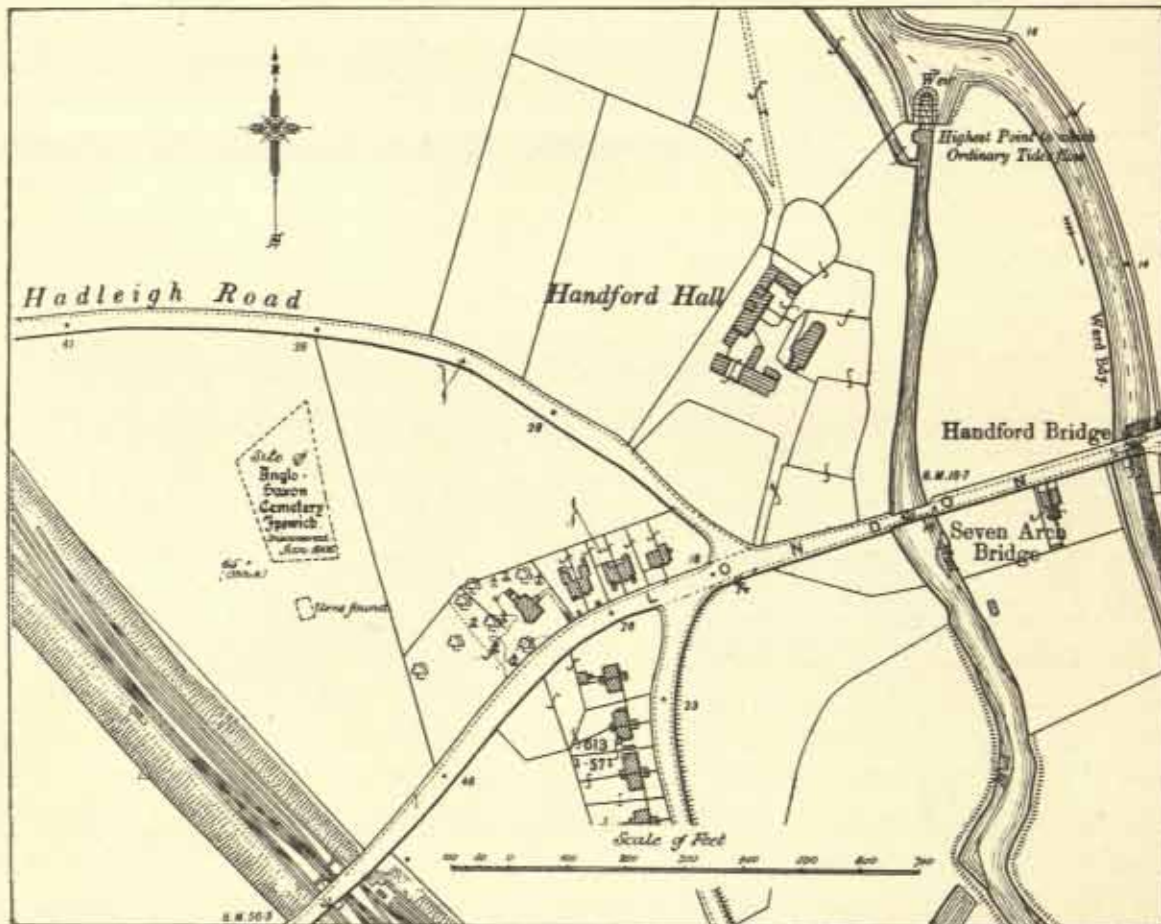


Fig. 1. Site of Anglo-Saxon Cemetery at Ipswich.

this was the case was soon proved by the finding of perfect skulls into which earth and stones had worked, filling them up and so preserving the normal shape.*

Owing to the fact that the "unemployed" workmen were engaged in piece-

* A number of skulls since found have also been subject to post-deformation, the result of burial without a coffin.

work, the search for relics was attended with great difficulties, as no sooner was the earth picked down than it was carried off in wheelbarrows and flung into the valley below.

Only by watching their rapid work as carefully as possible, and seizing upon any scrap of rusted iron or verdigrised metal that fell out, was anything saved. Finally I communicated the discovery to Mr. Packard, the chairman of the Ipswich Museum, and offered my services to the committee, when we obtained leave to have certain areas marked out for more serious research, and employed four men, whom I trained to the work, to excavate with a view to the Anglo-Saxon remains only. The scheme was warmly taken up by the Museum authorities, and the funds for this extensive work liberally supplied, so that it might be done as efficiently as possible.

As skeletons turned up at various parts of the large area that was being levelled, it became evident that our small gang would have to turn over the whole of the surface in advance of the army of unemployed, if we were to lose nothing of this important find. The depth of the graves varied from $2\frac{1}{2}$ to 5 feet, and they were to be found in the softer material overlying the ballast; so that while the rest of the workmen had to remove the hard clays and stony bands below, we were able to keep ahead of them by continually moving from one part of the field to another.

Our labours were soon rewarded by the discovery of a number of interments, often accompanied by the interesting relics peculiar to Saxon burials. I have already superintended the examination of 110 graves, making in all, with the four skeletons previously found, 115 burials.^a There is still much to be done, and I hope when the field has been completely looked over we shall have a collection of Anglo-Saxon relics at Ipswich which will hold its own with other local collections of the kind.

Summing up the results of our work up to the present, the following is a list of relics found:^b

- Forty-two spear-heads, including a toy lance (or arrow-head).
- Seventy-seven knives.
- Sixteen bosses of shields (some broken).
- Seven handles of bosses.

^a Since reading this paper the work has been continued, and the total number of graves examined has now reached 159. See Appendix.

^b For the full number of relics found, including those since the paper was read, see Appendix.

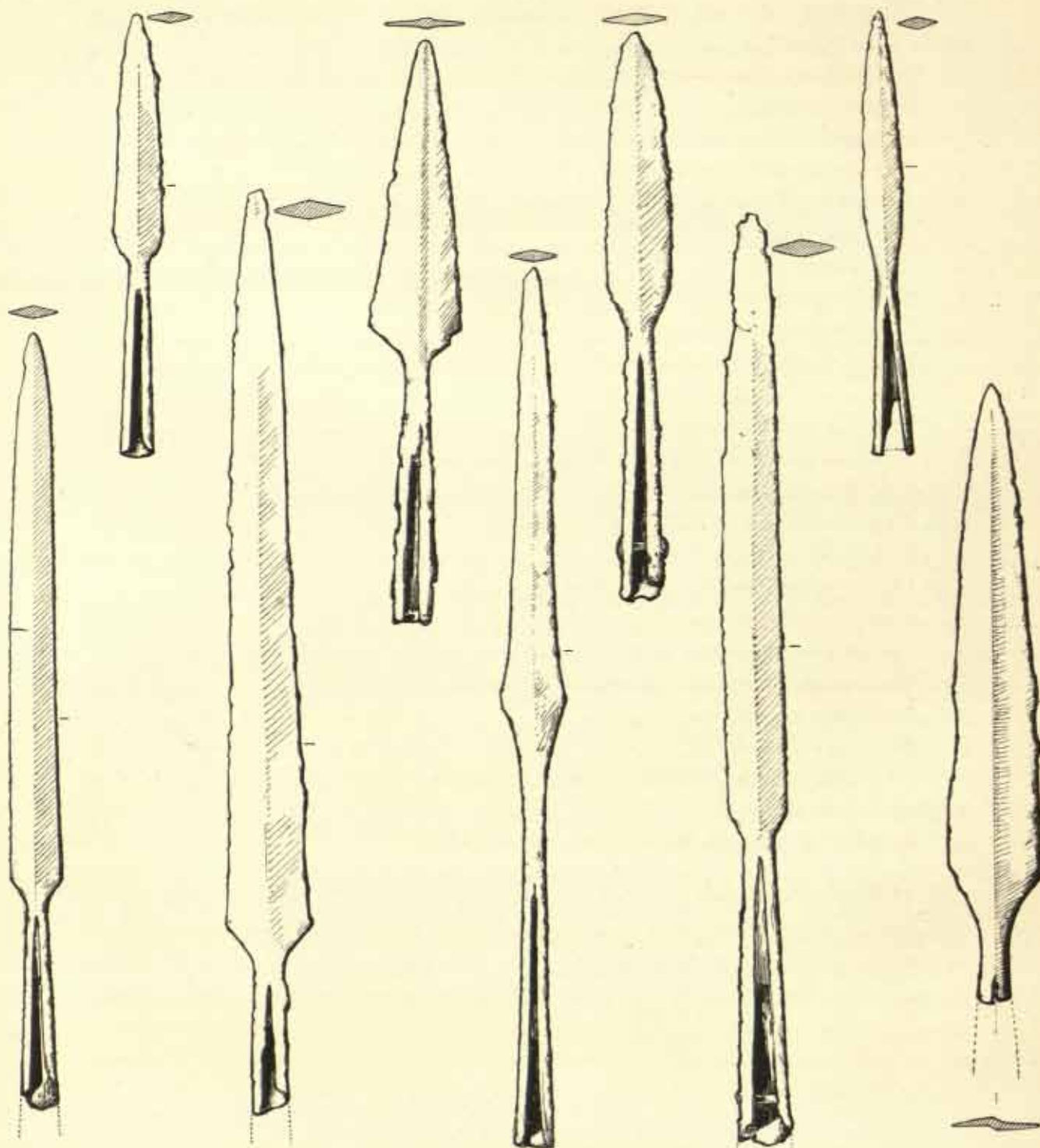


Fig. 2. Iron spear-heads, with sections, Ipswich. (4.)

Thirty-two necklaces of beads, containing in all 848 beads; also three single beads worn by men.

One necklace composed of a silver ring, on which is one amber bead.

Twenty brooches.

One large ornamental buckle in three parts (of the Frankish type).

One ditto smaller ornamented with bronze bosses.

Sixteen small bronze buckles with and without shanks.

One iron key.

One bronze key.

Six iron pot-hooks (?) and latch-keys (?).

Two double-toothed combs.

Twenty-four brownish-black urns (with and without bones), many broken.

Four glass drinking cups.

Two pairs of tweezers.

Two small finger-rings or ear-rings of twisted wire.

One ditto of bronze.

Three small circular silver pendants.

Four bronze rings.

One spindle-whorl of red pottery.

Four strike-a-lights.

One large ornamental bronze ring.

One square fragment of a bronze ornament.

Nine iron buckles.

Six iron rings.

Two frameworks of *situlæ*; besides miscellaneous scraps of iron objects, such as *chatelaines*, etc.

One Roman coin of Marcus Aurelius, A.D. 161.^a

The spear-heads and javelin-heads (Fig. 2) are of great variety, no two being identical in shape. They vary from the short broad form to the long slender weapon of great elegance, but all with one exception have the longitudinal slit in the socket to receive the wooden staff. In many the wood may still be seen. Some of these spears appear to have been lying on cloth, for material of a coarse texture is imprinted on the iron rust. Where we have been able to uncover them completely before removal, they have been mostly found on the left side of the

^a This coin was unfortunately lost in the post, and has not been recovered.

skeleton, with the point upward, reaching a little above the skull, though in a few cases they are on the right side.

On November 2nd last, when opening the 101st grave, a curious spectacle presented itself. Working from the feet upwards, and hollowing out the grave without removing the top, we were surprised to find that, instead of lying towards the north-east, the lower limbs of the skeleton were turned in a northerly direction.^a A rather large knife was found at the waist, but the spear-head, instead of lying horizontally beside the skeleton, was raised at an angle of 45 degrees, the point being within a foot of the present surface. From the direction of the socket, the shaft of the spear appeared to have been beside the hand of the skeleton. This at first suggested the idea that the person buried had moved, and had attempted to thrust the spear through the $3\frac{1}{2}$ feet of earth that covered him. I took a sketch of the skeleton, as it lay, with the spear raised. Since writing the above I have found another skeleton with a spear raised at an angle of 20 degrees, from which we may conclude that there is a less gruesome explanation of the peculiarity.^b I have found small spear-heads apparently buried in the graves of youths, and one which was beside a rough earthen pot is so small as to suggest its possibly being the toy weapon of a child. There is, however, a difference in the arrangement of the slit in the socket, which does not run in a line with the flat surface of the spear-point, and may prove that it was the point of some other weapon. The knives are invariably worn at the waist. I have found them on the right side. They vary both in shape and size. The women's knives, though sometimes smaller, are not to be distinguished from the men's. I found one firmly welded by iron rust to an iron ring, which it exactly crossed in the middle. They are worn with the point downwards.^c Iron axes have before been found in Anglo-Saxon graves, but the only weapon of the kind found in this cemetery was an axe-head or adze exactly corresponding to the La Tène type.

The bosses (Fig. 3), like the spear-heads, show considerable variety in form and size. Three are of the rare conical form. One of these was very tall and egg-shaped, but it is unfortunately broken. Two of more ordinary type have tin-plated

^a This is I imagine due to land creep, as I have since noticed the same peculiarity in other skeletons.

^b Possibly the spear, being too long for the grave, was placed in a more or less upright position.

^c I believe all the knives were originally in leather sheaths, and were stuck in a belt.

studs in the centre, and one is covered with hide. As to their position, it appears

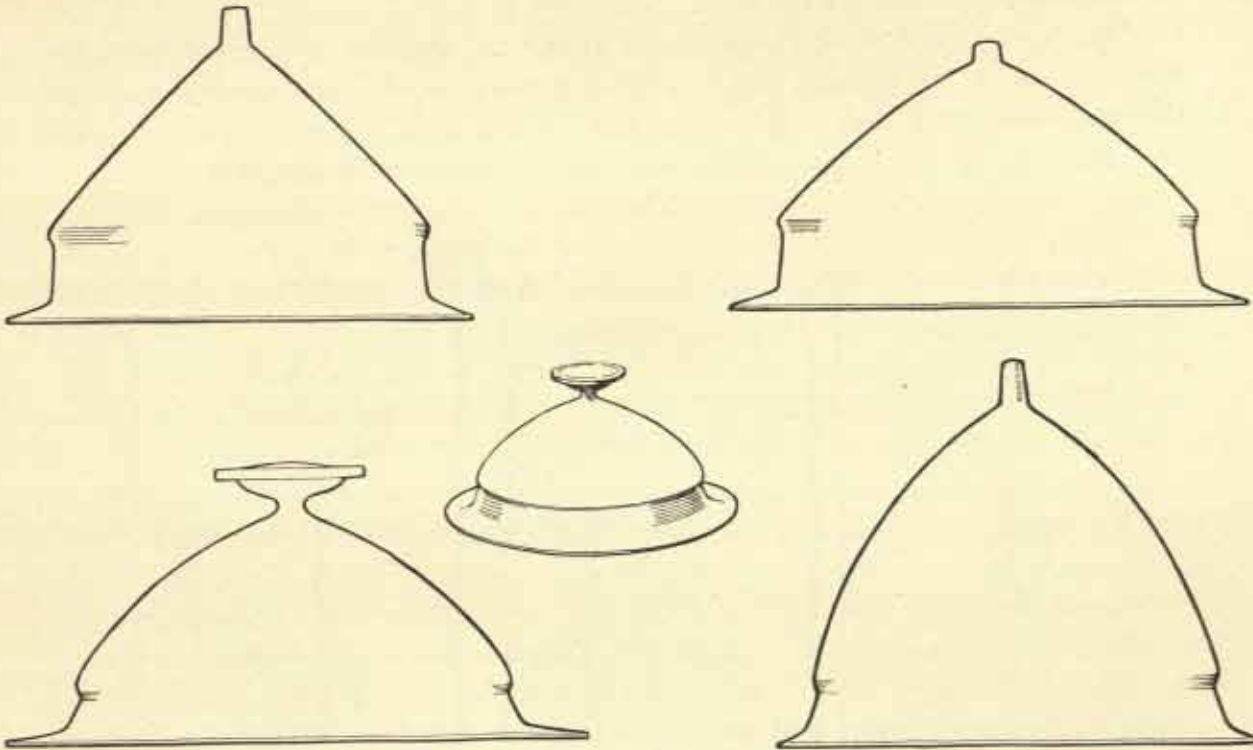


Fig. 3. Iron shield-bosses, Ipswich. ($\frac{1}{2}$ and $\frac{1}{4}$.)

to vary, some having been found on the right side of the skeleton and two over the mouth. As I thought this evidence important, I have kept the teeth which they covered, some of which were found when cleaning out the boss. Most of the iron handles which crossed the bases of the bosses are broken, but one I found complete and in position. They appear to have been covered with hide or wood.

The iron rings and iron buckles (Fig. 4) were found both in the graves of men and women, and invariably near the waist of the skeleton, the larger ones beside the men and the smaller beside the women. From the rings depended the pot-

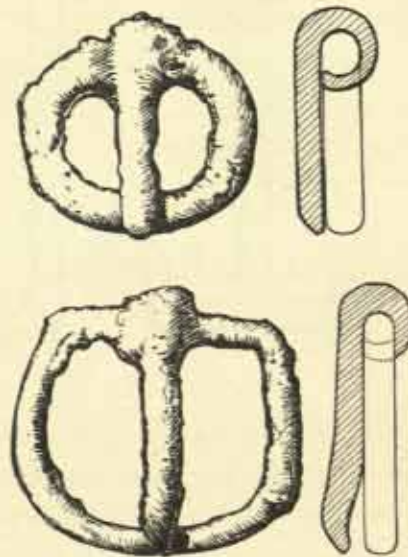


Fig. 4. Iron buckles, with sections, Ipswich. ($\frac{1}{4}$.)

hooks (Figs. 5 and 6) and keys, in the case of the women, and probably other instruments in the case of the men. The most common form of pothook or key in this cemetery is the crook-shaped hook (Fig. 6). Another of different form was hanging from the right side and was lying across the body, with the lower part of the hook against the left hand. I took a drawing of it in position before it was removed. Four iron strike-a-lights were in the graves of men.

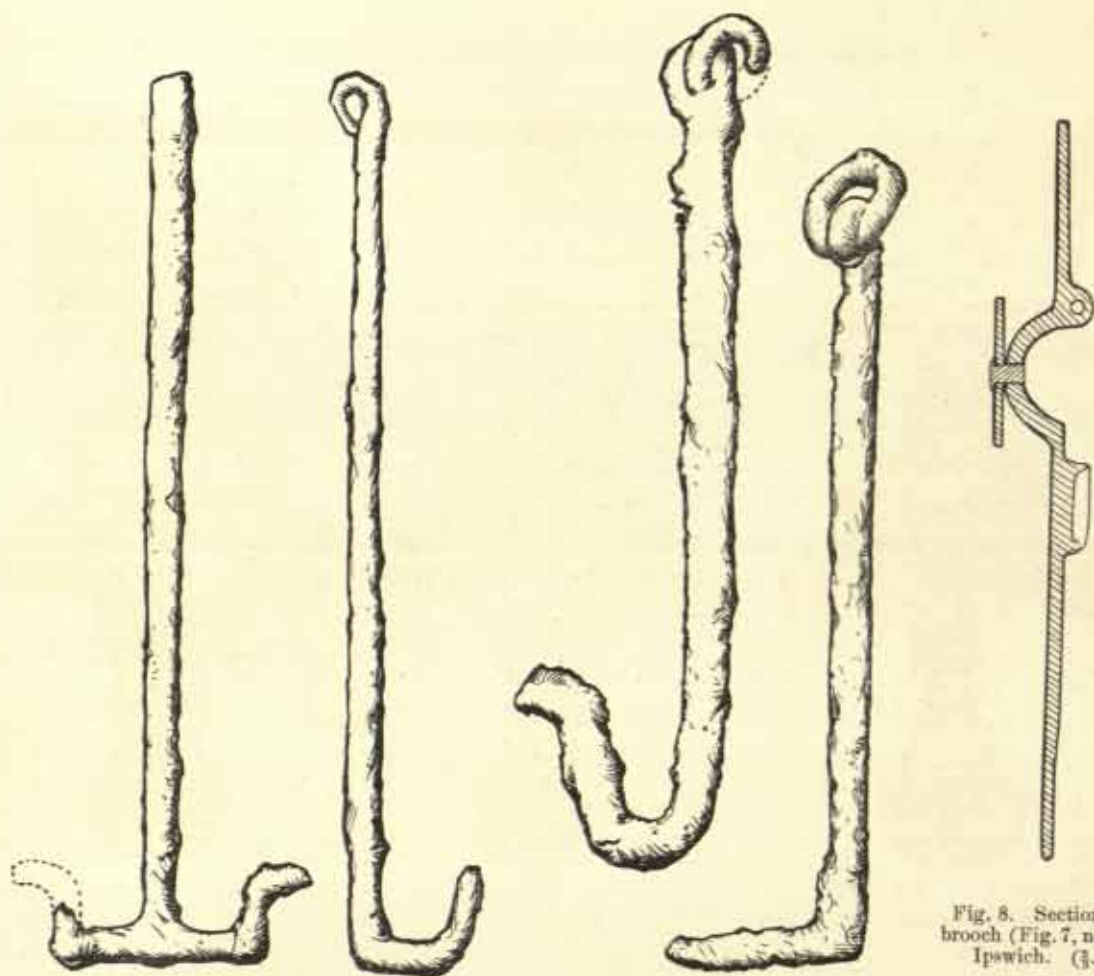


Fig. 5. Iron girdle-hanger. Ipswich. (1.)

Fig. 6. Iron girdle-hangers, Ipswich. (4.)

Fig. 8. Section of brooch (Fig. 7, no. 2), Ipswich. (3.)

Among the eight square-headed brooches, which are of bronze gilt, beaten on to them, two are deserving of special attention. One (Fig. 7, no. 2) has a stud on the bow (Fig. 8), a type rarely found in England. Another example of the stud was exhibited before the Society of Antiquaries by Sir John Evans, who mentioned a few others as known to him. Brooches with studs on their bows have been found in the Island of Bornholm, Denmark.

Another is of a pattern quite distinct from the rest (Fig 9, no. 1); not only is the general outline of the brooch dissimilar, but the central boss has also supported a stud, which unhappily is lost. Several of these brooches are in a very perfect condition, some having the silver plates with which they were invariably decorated still upon them. The largest of these had been broken and mended with iron. With regard to the position in which the brooches were



Fig. 7. Square-headed bronze-gilt brooches, Ipswich. (4.)

placed, it is probable that it varied according to the numbers in use. In the Ipswich cemetery we never find more than one of the larger brooches on one individual, though the smaller ring brooches are found in pairs. That both the square-headed brooches and the circular jewelled brooches were worn in the centre beneath the chin we have the evidence of the verdigrised condition of many of the chin and neck bones. I noticed this in six instances, and preserved the discoloured

bones as evidence. It has been generally believed that the square-headed brooches were always placed with the narrow part downward, but the last brooch of this character found by me was certainly in the reverse position. Mr. Godfrey-Faussett, who examined the Saxon cemetery at Bifrons (near Canterbury), found that the hammer-shaped brooches were invariably placed with the square part below.

Two beautiful specimens of jewelled brooches of the Kentish type were also found. As these are very rarely met with in East Anglia, it is a great satis-

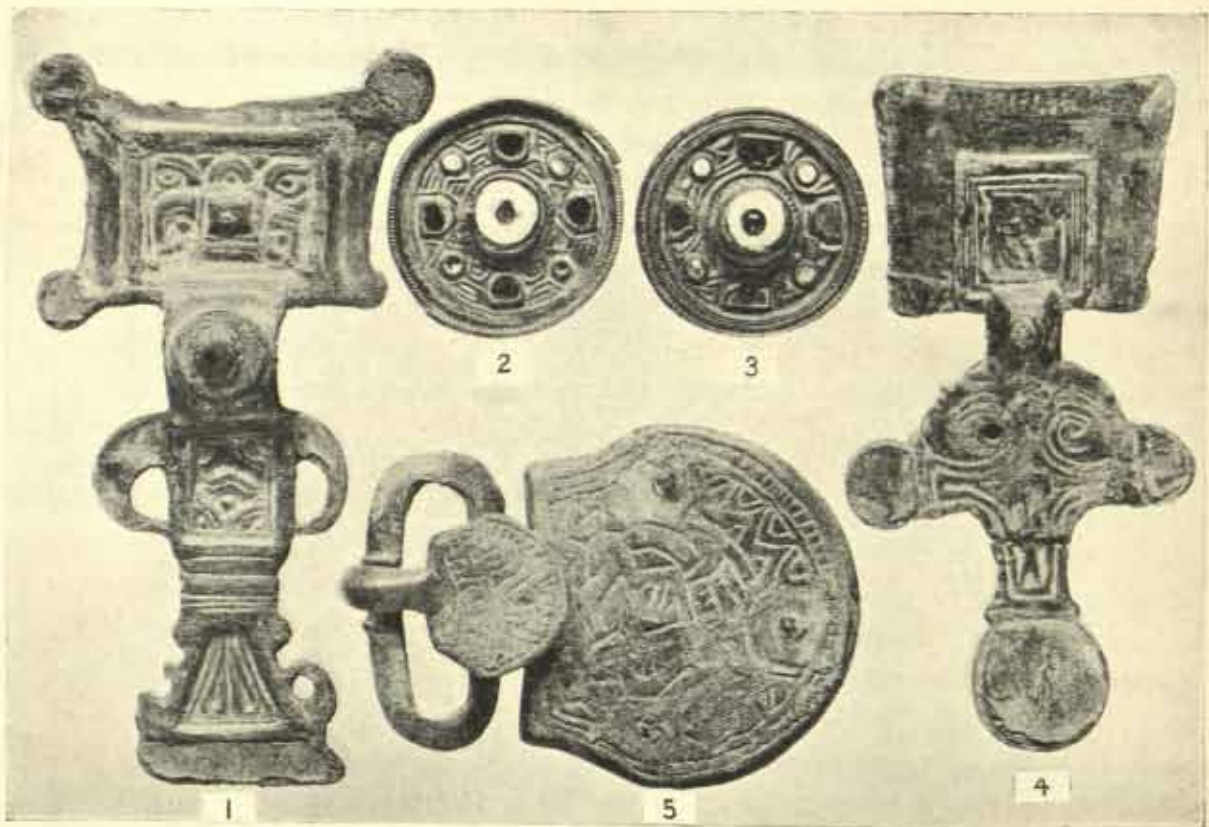


Fig. 9. Brooches and Frankish buckle, Ipswich. (4.)

faction to have discovered them in Ipswich. One (Fig. 9, no. 3) is unusually perfect, the central boss with its ruby-coloured carbuncle being intact. When found, the central jewel of the other brooch (Fig. 9, no. 2) was also in its place, but I had the mortification of seeing the shell or ivory setting dissolve into impalpable dust as I lifted it from the grave. Happily the garnet dropped into the cavity left by the boss, and with it the hatched leaf of gold foil which had been placed behind the stone to increase its brilliance. The garnet is now mounted on plaster of Paris.

The flat circular fibulæ or ring brooches are mostly plain, two only being ornamented, one with rings and dots and the other with scratched markings curiously like the ornamentation of the old Highland brooches. I have lately seen in Scotland tinker-made ring brooches exactly resembling these, both as to size and fastening. In several of the specimens found in Ipswich the garment is still seen adhering to the pin, and even the folds caused by forcing the pins through the material are distinctly visible. In two instances these brooches were placed one below the other on the breast, the upper one immediately below the chin-bone, which was discoloured by it.

Except in one instance where four beads were found in a man's grave, and in three others where single beads were found with men, all the bead necklaces were in the graves of women. I have obtained up to the present thirty-two of these. In every case the wire or thread which held the beads had disappeared, and they were only found by careful sifting of the earth, after picking out all that could be discovered about the neck of the skeleton. In a large number amber beads predominate, but in some of the necklaces these are entirely absent. The rest of the beads consist of glass, clear and opaque, vitreous pastes, and crystal. The largest of these necklaces contains 108 beads.

The arrangement of the beads is more or less obvious. In most cases a distinct gradation in the size of the beads can be recognised, from the large central bead, which is almost invariably found, to the small specimens into which the necklace tails off*. The disposition of the beads is also suggested by the fact that a large majority of them are found in pairs, or at any rate in equal numbers, from which it may be inferred that they were arranged symmetrically on either side of the centre bead.

The patterns of the beads are extremely varied. (See Plates XXXI., XXXII., and XXXIII.) In four of them a serpent is portrayed. This I first noticed on two barrel-shaped beads which lend themselves to such a design. It is also clearly seen on a single bead of blue-black glass. The serpent is conspicuously represented in opaque white on the flattened surface. Among the beads are a few both yellow and blue of the melon shape.

Double beads are also frequently found. In one case only did we discover beads near the wrist. These were of amber, while the necklace was formed of vitreous paste.

A silver ring necklace with a single amber bead is possibly a unique find.

* In the accompanying plates the order of the beads has been somewhat rearranged so as to show every variety of pattern found; consequently the necklaces do not show the symmetrical order above referred to, nor the large proportion of amber beads.

As the only other object with it was a small knife, it is difficult to determine whether it belonged to a male or female skeleton.

Another rare discovery was that of a large bronze buckle of Frankish type. (Fig. 9, no. 5.) Buckles closely resembling it from graves in the north-west of France are to be seen at the British Museum, and I have also seen similar specimens in Sir John Evans' private collection of Merovingian jewellery; but so far as I know this is the first instance of a buckle of the kind occurring in an Anglo-Saxon grave. One of the small bronze buckles with shank is interesting from the position in which it was found, namely, attached to one of the bones of the ear. Although in cleaning it, it became detached, it has been replaced on the bone, which is stained with verdigris. From this it would appear that it held either a helmet or other head-gear in position. Another bronze object which has an ornamental pattern, is the handle of the rather mysterious instruments often to be found hanging from the girdles of women; possibly part of a key or purse. Bronze rings are found near the waist in the graves of women. On November

24th I obtained another ornamental bronze buckle, an illustration of which is here given. (Fig. 10.)

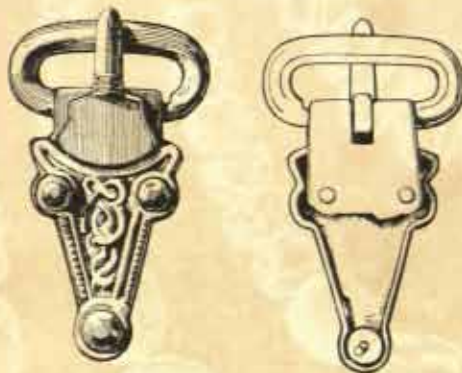


Fig. 10. Bronze buckle, Ipswich. (†)

Two amber-coloured glass drinking-cups (Fig. 11) were found and brought to me a few days after I first visited the Anglo-Saxon site. They were said to have been discovered at the depth of $1\frac{1}{2}$ foot, but by the time I had arrived on the field the section had been cut away, and I could get no further particulars.^a Although I have

personally superintended the opening of 110 graves, we never came upon glass again until October 18th last, when two shallow glass bowls of a pale blue-green colour (Fig. 12) were found at the feet of a female skeleton. They are true tumblers which had to be emptied before they could be put down.^b

The grave also contained a bone comb ornamented with dots and circles, a

^a One other which was taken from the field was purchased by Clement Casley, Esq., and has been presented to Ipswich Museum.

^b Analysis of fragments of the blue glass bowls, by E. G. McBretney, F.I.C., F.C.S., Castleford, Yorks.

Silica	69.19	Lime	7.12
Oxide of Iron	0.48	Magnesia	0.49
Alumina	0.57	Alkalies	22.15



ANGLO-SAXON BEAD NECKLACES FOUND AT IPSWICH. (1)

small bronze buckle with shank at the waist, fragments of a pot of superior make, two finger or ear-rings of twisted wire with movable knots, and a pot-hook hanging from the waist and lying across the skeleton to the left hand. I sketched the pot-hook in position before it was removed.

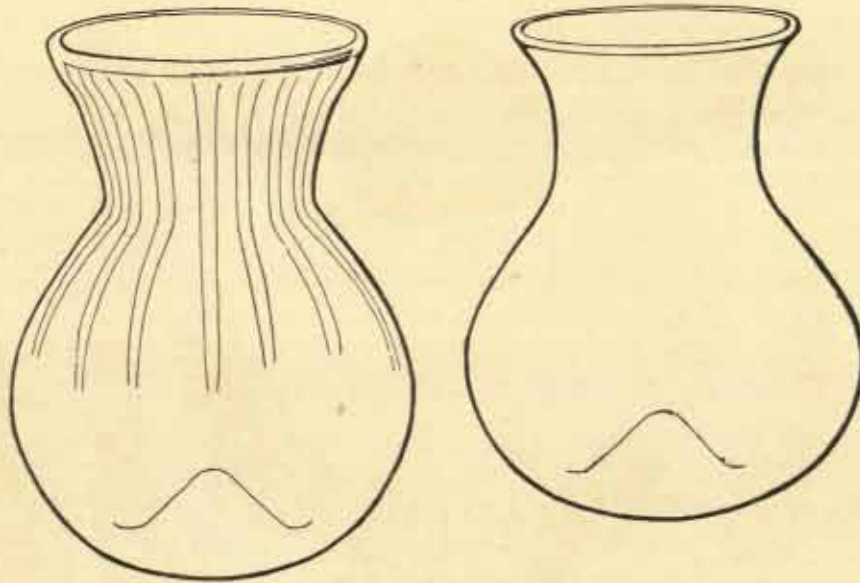


Fig. 11. Amber glass cups, Ipswich. (½.)

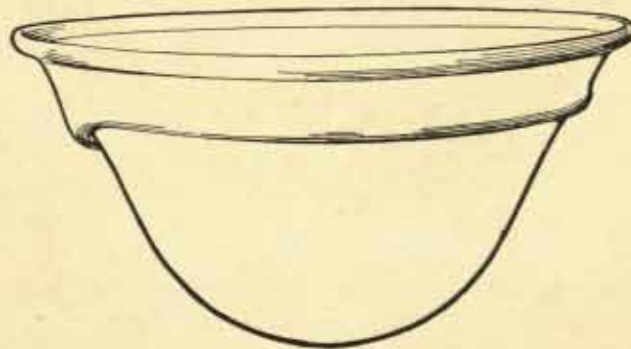


Fig. 12. Green glass cup, Ipswich. (¾.)

We have found in all twenty-four urns or fragments of urns. Two lately discovered in different graves were on the left of the neck of the skeleton.

In four only the remains of bones have been found. One of these sepulchral urns has a hole purposely made through the bottom of it.*

* Since the above paper was read I have found many more urns containing bones.

Eight have been found without skeletons beside them.

The cemetery is not yet worked out, and I hope shortly to continue my researches. (See Appendix.)

The position of the skeletons has been almost uniform, that is to say, extended on the back with the arms close to the side and facing north-east, though in a good many cases the land creep seems to have slightly twisted both head and legs northward, the spinal column still keeping its position. In two instances the legs were doubled back, in a kneeling attitude. One of these faced south-west, and with it was a spear-head. The other faced north-east, and had nothing with it.

In two graves fragments of wood were found, but whether these belonged to a coffin or a box, or possibly a shield, it is difficult to say. In one of these a skeleton was seen to be facing south-west, and here we found an unusual number of relics. Among them were two small knives, one ornamental bronze ring, a pot-hook, a necklace of 108 beads including one of crystal, and a square-headed brooch of an unusual form.

The collection, which is the property of the Ipswich Museum, will be placed in the Museum of Local Archæology, Christ Church Mansion, Ipswich.

I have to thank Sir John Evans, Mr. Charles Hercules Read, and Mr. Reginald Smith for kind help given to me during my researches.

A LIST OF THE CONTENTS OF THE GRAVES FOUND AT IPSWICH.

Grave 1.	} Skeletons and contents thrown away by unemployed workmen.
" 2.	
" 3.	
" 4.	

1906.

Jan. 4.

Grave 5.—Fragments of skeleton; nothing with it.

Two amber glass drinking cups, found at a depth of $1\frac{1}{2}$ foot.*

Jan. 11.

Grave 6.—Part of skull and bones; found at a depth of $3\frac{1}{2}$ feet; nothing with it.

* These were found by the unemployed workmen and brought to me. I was told that two other glass vessels had been taken off the field, one of which was broken and one sold.

Jan. 19.

Grave 7.—Male skeleton, facing north-east; depth of grave $2\frac{1}{2}$ feet. Close beside the skull was an iron boss; the skull was much deformed through damp and pressure, the forehead being almost entirely flattened out; the teeth were ground down nearly to the fangs; wisdom tooth large and strong.

Jan. 23.

Grave 8.—Male skeleton, depth of grave 2 feet 8 inches; three yards to the left of Grave No. 7; iron spear-head and knife.

Jan. 23.

Grave 9.—Male skeleton, almost perfect, facing north-east, with legs doubled up; two bosses of shields, one with large button at the top; long bent spear-head, and fragments of brown-black urn.

Jan. 29.

Grave 10.—Female skeleton; depth of grave 2 feet 8 inches; necklace of eight beads.

Feb. 7.

Grave 11.—Parts of human skeleton; depth $3\frac{1}{4}$ feet; small knife, bronze buckle, portion of shank.

Feb. 8.

Grave 12.—Skeleton with upper part of skull much flattened, facing north-east; silver ring necklace, with one amber bead; also small knife; sex unknown.

Feb. 12.

Grave 13.—Skeleton, facing north-east; nothing with it.

Feb. 12.

Grave 14.—Male skeleton, facing north-east; with spear, knife, and boss of shield, with tinned button.

Feb. 13.

Grave 15.—Male skeleton, with small spear-head and knife; strike a-light, ornamented with cable pattern.

Feb. 14.

Grave 16.—Male skeleton, with large spear-head and knife.

Feb. 15.

Grave 17.—Female skeleton, facing north-east; knife; necklace of twenty-two beads (mostly amber); square-headed fibula; ring fibula, ornamented with dots and circles.

Feb. 18.

Grave 18.—Female skeleton, facing north-east; small knife, four beads, one of amber, one of pottery, and two of blue glass melon-shaped.

Feb. 19.

Grave 19.—Female skeleton, facing north-east; circular fibula (Kentish type), set with garnets and shell or ivory; small double-toothed comb on left side of skull; small iron chatelaine ring with iron pendants much broken; large iron pot-hook. The chin-bone was covered with verdigris from the fibula which was placed below it.

Feb. 21.

Grave 20.—Male skeleton, facing north-east, with knife only.

Feb. 23.

Grave 21.—Male skeleton, facing north-east; spear-head, boss of shield, and knife.

Feb. 23.

Grave 22.—Male skeleton, facing north-east, with small spear-head on left side, boss of shield, and knife; boss near right shoulder, and rough black-brown urn about half a foot higher on right of skull.

Feb. 27.

Grave 23.—Female skeleton; small knife and necklace of twenty-eight beads; chin-bone and neck-bone discoloured with verdigris.

Feb. 27.

Grave 24.—Female skeleton, facing north-east; necklace of eleven beads, one being of crystal; square-headed brooch, top missing; side of chin-bone discoloured with verdigris.

Mar. 7.

Grave 25.—Five skeletons found while I was ill; spear-head and broken boss only found during this time.

Mar. 16.

Grave 26.—Male skeleton, facing north-east; large ornamental buckle in three pieces (Frankish type) lying beside upper leg bone, which was discoloured with verdigris.

Mar. 19.

Grave 27.—Male skeleton, facing north-east; broken spear-head.

April 11.

Grave 28.—Male skeleton; boss of shield, two knives, and small buckle.

April 20.

Grave 29.—Female skeleton, facing north-east; a large square-headed fibula in very perfect condition, with ornamental stud on bow (this is a very rare type); also necklace of five beads.

April 23.

Grave 30.—Female skeleton; ring fibula; necklace of thirty beads.

April 24.

Grave 31.—Remains of skeleton; sex unknown; one bead only found with it.

April 26.

Grave 32.—Male skeleton; spear-head.

May 7.

Grave 33.—Bones of skeleton disturbed; broken knife and one crystal bead.

(Our excavations did not commence again till August 21st, 1906.)



ANGLO-SAXON BEAD NECKLACES FOUND AT IPSWICH. (1)

Aug. 21.

Grave 34.—Urn only, found in fragments.

Aug. 22.

Grave 35.—Male skeleton, very much gone to pieces, facing north-east; large spear-head; broken boss; small knife with sheep's horn beside it. The boss was on the right of the skull, spear-head on the left, knife and horn at waist.

Aug. 23.

Grave 36.—Male skeleton gone to pieces; broken spear-head with point upwards, and broken boss.

Aug. 23.

Grave 37.—Skull only, of female, flattened sideways; depth of grave 3 feet 5 inches; chin-bone stained with verdigris; seven beads.

Aug. 23.

Grave 38.—Urn almost whole, containing fragments of bone, found alone at depth of 3 feet 6 inches.

Aug. 24.

Grave 39.—Female skeleton, facing north-east; two ring brooches (one plain, one decorated with scratched lines) arranged one below the other on the breast; bronze buckle near the upper brooch; chin and neck bones verdigrised; necklace of fourteen beads including two of crystal; iron ring on left side of waist with small knife across the middle of it and adhering to it.

Aug. 24.

Grave 40.—Male skeleton gone to pieces; broken spear and knife.

Aug. 24.

Grove 41.—Female skeleton, facing north-east; necklace of nine beads; one square-headed brooch; one knife; half of an iron ring.

Aug. 25.

Grave 42.—Female skull, bones gone to pieces; depth of grave 3 feet 5 inches; necklace of ten beads, including very large amber bead with hole worn into keyhole shape; two ring brooches placed on breast, one below the other; one has material adhering to the pin, the other without pin.

Aug. 27.

Grave 43.—Male skeleton, facing north-east; one long broken spear-head, point upwards.

Aug. 28.

Grave 44.—Fragment of female skull; depth of grave 3 feet 5 inches; necklace of fourteen beads, including one with ring and dot ornamentation, with serpent portrayed on it; also two barrel-shaped beads in glass paste with serpents in white.

Aug. 30.

Grave 45.—Male skeleton facing north-east, without accessories.

Aug. 30.

Grave 46.—Female skeleton, facing north-east; depth of grave 3 feet; necklace of eleven beads of vitreous paste; broken ring brooch, one foot below head.

Aug. 30.

Grave 47.—Fragment of urn only.

Aug. 30.

Grave 48.—Skull only; two knives, one broken.

Sept. 3.

Grave 49.—Male skeleton, in fragments, with small spear only.

Sept. 3.

Grave 50.—Skeleton in fragments; small knife and iron ring.

Sept. 3.

Grave 51.—Skeleton in fragments; small knife only.

(These three skeletons were about 3 feet apart, that is to say, the feet of one 3 feet from the head of the next. Between two of them an urn was found, nothing in it.)

Sept. 4.

Grave 52.—Female skeleton; depth of grave 4 feet 6 inches; the iron fittings of a bucket (situla) found near the feet; ring and knife at waist; necklace of eighty-eight beads, thirty-six being coloured, fifty-two of amber; one square-headed brooch with the top lost.

Sept. 5.

Grave 53.—Female skeleton facing north-east. Necklace of thirty-four beads, including two flat amber ones; ring brooch; broken knife and broken urn.

Sept. 6.

Grave 54.—Skull only, of male. One bead at neck, of opaque blue-black glass with white serpent; fine spear-head, perfect, reaching $\frac{1}{2}$ foot above the skull.

Sept. 6.

Grave 55.—Fragments of skull, with knife in two halves.

Sept. 6.

Grave 56.—No bones visible; one broken knife.

Sept. 6.

Grave 57.—Female skull, bones disappeared; necklace of thirty-six beads, many of them double; three amber beads found beside arm, so probably a bracelet; small knife near to them.

Sept. 7.

Grave 58.—Male skull; spear-head; boss of shield; knife; iron strike-a-light; also handle of boss with canvas on it.

(The boss is of the rare conical shape. The strike-a-light and knife were together at the waist, the spear-head leaning against the skull.)

Sept. 10.

Grave 59.—Female skull, other bones disappeared; depth of grave 3 feet 6 inches; one square-headed brooch with top lost; one bronze buckle; one small iron buckle; knife; and coin of Marcus Aurelius, A.D. 161. The full inscription of this coin would be *CONCORDIA AVGVSTOR. TR. POT. XV. COS. III. S. C.*

Sept. 11.

Grave 60.—Male skeleton, facing north-east. Boss over the mouth, with teeth beneath it; pair of tweezers; large spear-head apparently on right of skull, point upwards.

Sept. 11.

Grave 61.—Male; no bones visible; broken spear-head in two halves, point upwards; beside it was half a peck of wood ashes. This seemed to be in a large pit.

Sept. 11.

Grave 62.—Female; no bones visible; one knife; one broken buckle; one broken iron pot-hook.

Sept. 12.

Grave 63.—Female skeleton; necklace of six beads, no amber.

Sept. 13.

Grave 64.—Female; no skull visible; necklace of twenty-two beads, many small and tube-like, red, white, and blue, with large centre bead; small iron buckle and broken knife.

Sept. 13.

Grave 65.—Bones disappeared; knife, hook, and broken tweezers.

Sept. 13.

Grave 66.—Female; bones mostly disappeared; necklace of eleven beads, all amber but two; knife and small iron buckle.

Oct. 8.

Grave 67.—Small portion of skull; three beads (two small pipe-shaped, with large centre bead); two nails and small broken knife.

Oct. 8.

Grave 68.—Fragments of skull; one marble beside it.

Oct. 9.

Grave 69.—Skeleton almost disappeared; small knife near skull.

Oct. 9.

Grave 70.—Began to work further down slope on north-west side. Skeleton in good preservation lying north-east on back, limbs straight out, arms straight down side; forehead pressed down over jaw; upper leg bone 18 inches, lower leg bone 15 inches. Scrap of iron buckle only found.

Oct. 9.

Grave 71.—Another skeleton in fragments, buried above the last; nothing with it.

Oct. 9.

Grave 72.—Skeleton flung out by unemployed; one horn core.

Oct. 10.

Grave 73.—Female skeleton in good preservation; necklace of twenty beads; spindle-whorl of red pottery; broken knife; scrap of ivory and two nails.

Oct. 10.

Grave 74.—Male skeleton, bones scattered; broad short spear-head.

Oct. 11.

Grave 75.—Male; depth of grave 4 feet 6 inches; flat broad spear-head; two knives; small bronze buckle, with shank adhering to ear-bone, which was stained with verdigris.

Oct. 11.

Grave 76.—Female skeleton gone to pieces; urn in fragments; near to it twenty-eight beads; knife 2 feet below them; good bronze buckle; depth of grave $3\frac{1}{2}$ feet.

Oct. 12.

Grave 77.—Male and female; urn whole when found, but went to pieces; close to it twenty-eight beads; scrap of bone only; perfect spear-head; knife and bronze buckle with shank.

Oct. 13.

Grave 78.—Leg bones of male skeleton; fragment of spear-head; small knife.

Oct. 13.

Grave 79.—Female skeleton disappeared; two beads; fragments of small iron chatelaine and small knife.

Oct. 14.

Grave 80.—Parts of skeleton; nothing found.

Oct. 14.

Grave 81.—Fragments of skeleton; nothing found.

Oct. 15.

Grave 82.—Male skeleton in good preservation; short broad spear-head; small knife; fragment of iron, use unknown.

Oct. 15.

Grave 83.—Male skeleton, appeared to be facing south and to be doubled up; one spear-head.

Oct. 15.

Grave 84.—Parts of male skeleton; small spear-head, perfect.



ANGLO-SAXON BEAD NECKLACES FOUND AT IPSWICH. ($\frac{1}{2}$)

Oct. 18.

Grave 85.—Female skeleton, facing north-east; depth of grave 3 feet 4 inches; two bowls of blue-green glass, very shallow, found at feet; two small double-toothed combs on either side of feet; small buckle at waist, and pot-hook hanging from waist and lying across the body to the left hand; two finger-rings or ear-rings made of twisted wire.

(I sketched this skeleton before the pot-hook was removed.)

Oct. 19.

Grave 86.—Skeleton facing north-east; depth of grave about 4 feet; legs doubled back; nothing with it.

Oct. 19.

Grave 87.—Male skeleton, facing north-east; fine delicately made spear-head on left side, with point over shoulder; knife.

Oct. 19.

Grave 88.—Male skeleton, facing north-east; boss either quite over mouth or immediately below it; spear-head on left side.

Oct. 22.

Grave 89.—Skeleton gone to pieces, but facing north-east; small knife only.

Oct. 24.

Grave 90.—Fragments of skeleton; nothing with it.

Oct. 24.

Grave 91.—Fragments of male skeleton, facing north-east; spear-head and knife; four beads with it (I never before found more than one bead with a male skeleton); fragments of pot.

Oct. 24.

Grave 92.—Fragments of female skeleton; necklace of ten beads, including large amber in centre with hole worn to key-hole shape; circular jewelled brooch (Kentish type) set with garnet and shell or ivory, perfect except for the setting of the central garnet, which went to powder; cable rim round the brooch; portion of bronze girdle pendant.

The large amber bead showed signs of verdigris on one side.

Oct. 25.

Grave 93.—Male skeleton; two large knives and iron ring.

Oct. 25.

Grave 94.—Male skeleton; boss; fragments of knife and other iron; also pot-hook.

Oct. 26.

Grave 95.—Female skeleton, facing north-east; necklace of fifty-four beads; bronze girdle pendant.

Oct. 27.

Grave 96.—Broken urn full of bones; no skeleton with it.

Oct. 29.

Grave 97.—Broken urn only.

Oct. 30.

Grave 98.—Female skeleton, facing south-west; fragments of wood as if either box or coffin had been here; necklace of one hundred and eight beads, including one crystal and large amber; square-headed brooch of unusual type, with stud missing from the centre; ornamental bronze ring; pot-hook of crook shape; and two small knives.

Oct. 30.

Grave 99.—Small knife only.

Oct. 30.

Grave 100.—Male skeleton disappeared; large spear-head; small knife; bronze buckle with shank.

Nov. 1.

Grave 101.—Female skeleton disappeared; necklace of twenty-eight beads all glass paste; hook and fragment like small iron handle.

Nov. 2.

Grave 102.—Female skeleton, facing north-east; square-headed fibula, perfect, with all the silver plates complete.

(This was lying with the narrow end upwards on the breast. A portion of the chin-bone is stained green from contact with it. Close to the brooch was a necklace of ninety-four beads, including glass of melon shape vitreous paste, and amber. Adhering to the hinge of the brooch was a blue glass bead which I have replaced, as it was dislodged when cleaning the brooch. Among the beads were two small circular silver pendants, small knife, and small iron buckle.)

Nov. 5.

Grave 103.—Male skeleton, facing north-east, but with legs bent round to north; large knife at waist; on left side very elegant spear-head raised at an angle of 45 degrees, the tip of the spear was only 1 foot below the surface; depth of grave 3 feet.

Nov. 5.

Grave 104.—No skeleton; small knife only.

Nov. 5.

Grave 105.—Skeleton, facing north-east, with empty urn standing on left side of the neck; fragment of small knife.

Nov. 10.

Grave 106.—Female; no skeleton, only a scrap of bone; pot-hook or key, and knife.

Nov. 13.

Grave 107.—Skeleton, facing north-east; bones mostly disappeared; small knife and buckle.

Nov. 13.

Grave 108.—Male skeleton; spear-head raised at angle of 20 degrees; and knife.

Nov. 13.

Grave 109.—Male; small urn (no bones); beside it miniature spear-head.

Nov. 13.

Grave 110.—Skeleton, apparently a female, facing north-east, but head and legs twisted northward.

Nov. 14.

Grave 111.—Female skeleton, facing north-east; depth of grave 4 feet 6 inches; necklace of ten beads; large urn in fragments on left of skull; broken iron buckle attached to portions of iron belt studded with bronze.

Nov. 19.

Grave 112.—Female skeleton, almost disappeared; could trace position of bones by the white powder; facing north-east; necklace of sixteen beads and one small knife.

Nov. 19.

Grave 113.—Male skeleton, almost disappeared; a few teeth; small javelin-head.

Nov. 20.

Grave 114.—Skeleton gone to pieces; knife only.

Nov. 20.

Grave 115.—Grave opened by the unemployed; tall conical boss of extremely rare type taken out whole, but broken by them in attempting to clean it; also handle of boss.

APPENDIX.

Since this paper was read 44 more graves have been examined, bringing the total number up to 159. The limits of the cemetery have apparently now been reached. The area has been measured and marked out (see plan, Fig. 1).^a

^a These measurements were kindly made for me by Mr. C. W. Macfell, assistant borough surveyor, Ipswich.

Although a considerable number of relics have again been brought to light, the graves have not been so rich in them as formerly. This is owing to the fact that many appear to have been disturbed previously.

The more recent finds made from November 22, 1906, to January 31, 1907, include :

Ten burial urns (Fig. 13), nine of which contained human bones and were

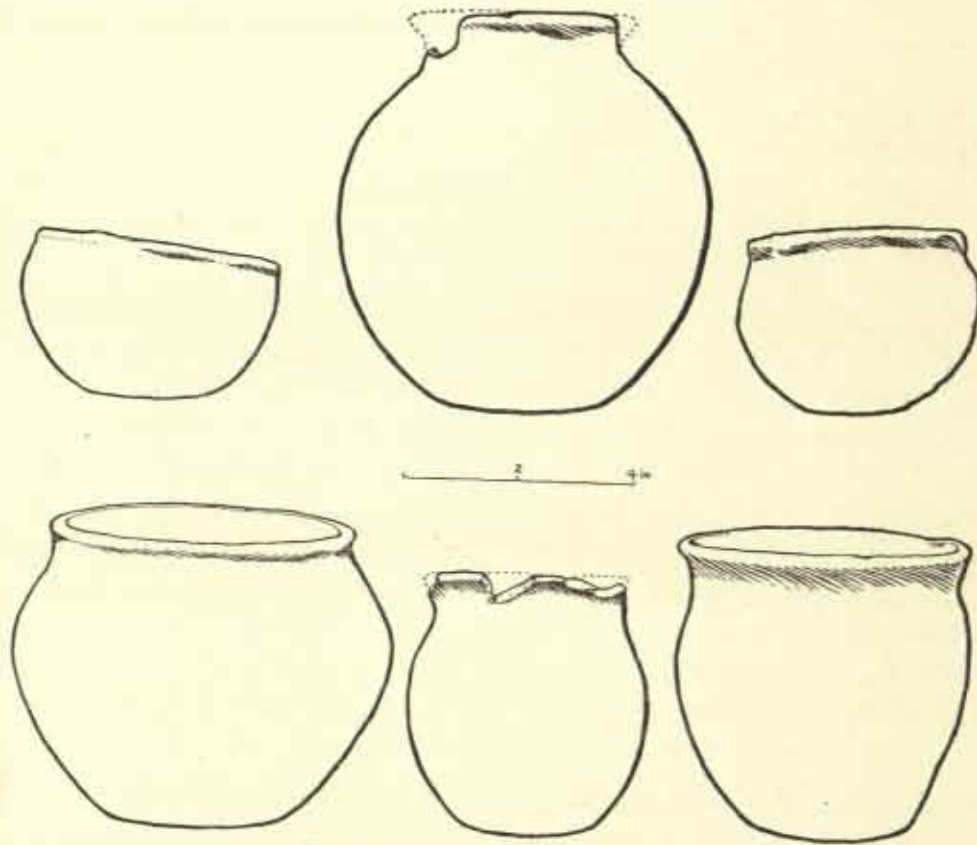


Fig. 13. Anglo-Saxon pottery, Ipswich.

buried alone, while one, which was empty, was on the left side of the skull of a male skeleton.

Seven spear-heads, four of which were seen to be on the right side. The position of the others unknown.

Nineteen small knives, invariably found near the waist.

One finely ornamented bronze buckle, found adhering to the lower arm-bone of a male skeleton. (Fig. 10.) The arm was lying across the waist.

Three necklaces of beads, containing in all ninety-seven beads.

One circular bronze brooch of rare type, with raised wheel-like pattern ornamented with silver plates (Fig. 14). This was in the grave of a woman. Although no urn was visible, the skeleton appeared to have been cremated, for a few burnt bones and cinders only were found. The lower jaw-bone was blackened

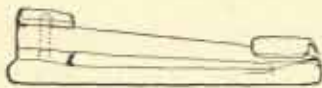


Fig. 14. Bronze brooch. ($\frac{1}{2}$.)

by burning, and the brooch was adhering to it, also two of the beads which formed part of a necklace of twenty-seven beads. A small broken ring brooch and broken knife were also beside it. The depth of the grave was 4 feet.

Two bosses of shields were found with male skeletons. One lay on the right side close to the skull. The position of the other, which was of conical shape, is uncertain.

Among smaller objects found were two strike-a-lights, portions of what appears to be a horse's bit, a staple, nail, fragments of a studded belt, links of a small iron chain, with fragment of pendant, etc. Five small rings of twisted wire were with female remains.

Similar rings are usually described as either ear-rings or finger-rings, but these were found below the chin among the beads of the necklace. Iron rings from which the pendants have been lost are often to be found at the waists of both men and women. We were fortunate in finding a key or pot-hook still attached to an iron ring at the girdle. Another of crook-shape was without a ring.

A second Roman coin has been found among the graves. Curiously enough it shows the head of Faustina, wife of Marcus Aurelius Antoninus, whose coin is the only other found with these remains. The coin dates before 175 A.D.

The following is a list of the more recently found graves with their contents:

Nov. 22.

Grave 116.—No skeleton; large urn full of bones, which went to pieces when moved; depth of grave $1\frac{1}{2}$ foot. This was about 20 feet from an urn previously found.

Nov. 22.

Grave 117.—Male skeleton facing east; large ribbed spear-head on right side, not reaching higher than the shoulder; depth of grave 2 feet.

Nov. 24.

Grave 118.—Male (?) skeleton, facing nearly north; ornamented bronze buckle on lower arm-bone which was across the waist (the bone was discoloured with verdigris); fragment of broken knife; tiny bronze buckle with shank on the leg.

Nov. 24.

Grave 119.—Skeleton to pieces; broken knife only.

Nov. 26.

Grave 120.—Fragment of skull, facing east; broken knife; fragment of urn.

Nov. 26.

Grave 121.—Flattened skull with bones facing north-east; teeth of ox above.

Nov. 26.

Grave 122.—Skeleton, facing north-east; very large skull; scrap of knife only; depth of grave 3 feet 6 inches.

Nov. 26.

Grave 123.—Female skeleton disappeared; necklace of thirty-nine beads and one broken; small iron buckle; depth of grave 2 feet.

Dec. 1.

Grave 124.—Female; no urn visible, but a few burnt bones and cinders. Among them a lower jaw bone blackened by burning. Adhering to it beneath the chin was a circular brooch of rare pattern and two beads. These were part of a necklace of twenty-seven beads; small broken ring brooch; also small broken knife; depth of grave 4 feet.

Dec. 1.

Grave 125.—Male skeleton. Teeth of young person, large and strong; large perfect spear-head on right side, the point reaching 8 inches above the skull. Good-sized urn on left of skull, nothing in it (it is ornamented); broken knife and pieces of iron and broken strike-a-light; two tiny bronze buckles; depth of grave 3 feet 6 inches.

Dec. 1.

Grave 126.—Nothing but skull facing north-east, with teeth of young person; broken knife; depth of grave 4 feet.

The complete record of the graves is here interrupted, as our workmen were taken off this part of the cemetery, and 180 unemployed set to work upon it, with the result that numerous graves were destroyed, and no relics found. Meanwhile we worked far to westward of the field, where we found broken urns only.

Dec. 3.

Grave 127.—Broken urn only.

Dec. 3.

Grave 128.—Ditto.

Dec. 3.

Grave 129.—Ditto.

Dec. 3.

Grave 130.—Ditto.

These urns were placed in a row about 1 foot apart at a depth of 2 feet 6 inches. They all contained human bones.

Dec. 4.

Grave 131.—Another broken urn found near the last; the earth about it much blackened.

I watched the unemployed at work and saw three skeletons turned out,
as follows:

Dec. 4.

Grave 132.—Male skeleton, facing north-east; spear-head on right and very good knife on left; depth of grave 4 feet.

Dec. 4.

Grave 133.—Male skeleton; spear-head; conical boss broken to pieces; depth of grave 3 feet 6 inches.

Dec. 4.

Grave 134.—Skeleton to pieces; broken knife.

Dec. 5.

Grave 135.—Male skeleton with strike-a-light and broken knife.

Dec. 10.

Grave 136.—Urn with child's remains.

Dec. 10.

Grave 137.—Skeleton facing north-east; nothing with it but a quantity of ashes.

Dec. 10.

Grave 138.—Male skeleton facing north-east; spear-head on right shoulder with point above the head; boss of shield on right side, close to skull; knife near waist, with iron buckle beside it.

Dec. 12.

Grave 139.—Female skeleton, with crook-shaped pot-hook or key.

Dec. 12.

Grave 140.—Broken knife only; skeleton disappeared.

Dec. 12.

Grave 141.—Skeleton. Nothing with it.

Dec. 12.

Grave 142.—Ditto.

Dec. 12.

Grave 143.—Large broken urn containing human bones; no skeleton.

Dec. 12.

Grave 144.—Skeleton; nothing with it.

Dec. 12.

Grave 145.—Broken knife only; skeleton disappeared.

Dec. 12.

Grave 146.—Large urn alone.

These eight skeletons found on December 12th appeared to have been disturbed.

Dec. 19.

Grave 147.—Female skeleton, facing north-east; teeth of aged person; thirty-one beads found below the chin; small bronze ring near the beads; broken knife and broken iron buckle, with fragment of belt with bronze studs at the waist.

Dec. 19.

Grave 148.—Female skeleton gone to pieces; pot-hook still attached to iron ring at waist; broken knife.

Dec. 19.

Grave 149.—Fine spear-head found by the unemployed.

Jan. 2.

Grave 150.—Skeleton only.

Jan. 4.

Grave 151.—Skeleton; knife only.

Jan. 7.

Grave 152.—Skeleton, facing north-east, gone to pieces; small knife only.

Jan. 7.

Grave 153.—Skeleton, facing north-east, gone to pieces; knife only.

Jan. 16.

Grave 154.—Female skeleton, facing north-east, but with head and legs pushed by soil creep in a northerly direction; below the chin a necklace of thirty beads, and three rings of twisted wire among the beads; small iron buckle at waist; teeth of tolerably young person.

Jan. 17.

Grave 155.—Skeleton gone to pieces, but facing north-east; small bronze buckle with shank, and broken knife; both on hip.

Jan 17.

Grave 156.—Good spear-head and knife brought to me by a man who found them beside a skeleton last year.

Jan. 21.

Grave 157.—Skeleton entirely disappeared; five beads; broken wire ring among them.

Jan 21.

Grave 158.—Skeleton almost disappeared; links of iron chain; staple; iron fragment studded; nail.

Jan. 31.

Grave 159.—Skeleton; nothing found with it.